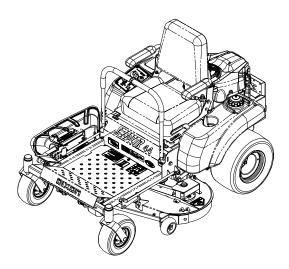


## **SPEEDZTR™ZTR®**



# Safety Instructions and Operator's Manual

Models ZTR®44/968999538 ZTR®36/968999539 ZTR®42/968999546 ZTR®44/968999547

#### IMPORTANT - READ CAREFULLY

The Dixon ZTR mower is both easy and fun to operate. However, any power mower must be operated properly to be safe. It is not a toy or a recreational vehicle. Before you use the mower, read this Operator's Manual carefully. It contains valuable information that is necessary for the safe operation of the machine. Observe all safety rules and become completely familiar with the controls.

The information contained in this manual applies to all Dixon ZTR SpeedZTR™ mowers.

See your authorized Dixon dealer for warranty service, parts and repairs or to answer questions you have about your new Dixon ZTR.

## **TABLE OF CONTENTS**

SAFETY AND WARNINGS	4-13
General Operation	6-7
Slope Operation	8-9
Fire Hazards	11-11
Children, Bystanders And Pets	12
Service	13
WARRANTY	14
SPECIFICATIONS	15-18
CONTROLS	21-24
Control Levers	19
Park Brake	20
Transmission Drive System	20
Blade Drive	21
Throttle Control Lever	21
Choke Control	21
Circuit Breaker	21
Cut Height Lift Lever	22
OPERATION INSTRUCTIONS	23-33
Starting	24
Towing	25
Testing Safety Systems	26
Mowing with Attachments	28-31
Side discharge	32
Grass height	33
CARE AND MAINTENANCE	34-45
Cutter blades	35
Engine	36
Battery	36
Tires	37
Lubrication	37-38
Belts	39
Neutral adjustment	40
Deck leveling	41
Deck removal	42
Cleaning	43
TROUBLESHOOTING	
STANDARD SERVICE PARTS LIST	46

#### **SAFETY**



**WARNING** Riding lawn movers, if improperly operated, can cause serious injury or death.

Pictured below are the most common causes of injury to the operator or bystander. Please read and understand this manual to prevent injuries.



Blade Contact



Run Over



Tip Over



Back Over

#### SAFETY



#### Safety Alert Symbol

When you see this symbol, <u>BE ALERT</u> to the potential for injury.

Follow the recommended safety precautions and safe operating practices.



#### DANGER

(highlighted in red)
indicates an imminently hazardous
situation which, if not avoided, will result
in death or serious injury.



#### <u>WARNING</u>

(highlighted in orange) indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



#### **CAUTION**

(highlighted in yellow)
indicates a potentially
hazardous situation which,
if not avoided, may result in minor
or moderate injury. It may also
be used to alert against
unsafe practices.

WARNING Failure to observe the following instructions could result in serious injury or death.

#### **GENERAL OPERATION**

Read, understand, and follow all instructions in this manual and on the mower before starting.

In this operator's manual, left and right, backward and forward are used in relation to the machine's normal driving direction.

Only allow responsible adults, who are familiar with the instructions, to operate the mower.

Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.

Be sure the area is clear of bystanders before moving. Stop mower if anyone enters the area.

Never direct discharged material toward anyone. Avoid discharging against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade(s) when crossing gravel surfaces.

Do not operate the mower without either the entire grass catcher or the deflector in place. This will decrease the possibility of injury from objects being thrown by the mower blades

Never carry passengers.

Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.

Never leave a running mower unattended. Always turn off blades, set Park Brake, stop engine and remove key before dismounting.

WARNING Failure to observe the following instructions could result in serious injury or death.

## **GENERAL OPERATION (continued)**

Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.

Disengage blade(s) when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.

Mow only in daylight or good artificial light.

Do not operate the mower while under the influence of alcohol or drugs.

Slow down before turning to reduce the risk of tip-over.

Watch for traffic when operating near or crossing roadways.

Use extra care when loading or unloading the mower into a trailer or truck.

Always wear eye protection when operating machine.

Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

Follow the manufacturer's recommendation for wheel weights and counterweights.



WARNING Failure to observe the following instructions could result in serious injury or death.

#### SLOPE OPERATION

Slopes are a major factor related to loss-ofcontrol and tip-over accidents, which can result in severe injury or death.

All slopes require extra caution. If you feel unsure on any slope, do not mow it!

#### DO

Mow across the slope with your Dixon ZTR -- never up or down. This will decrease the risk of tip-over.

Remove obstacles such as rocks, tree limbs, wires and other foreign objects that can be thrown by mower blades.

Watch for holes, ruts, roots and bumps and uneven terrain that could overturn the mower. Tall grass can hide such obstacles.

Use slow speed. Tires may lose traction on slopes even though the brakes are functioning properly.

Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly down the slope.

Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.

Use extreme caution when operating the mower with attachments to prevent tip-over or roll-over.

If front wheels lift off the ground, pull levers back to stabilize the mower. Discontinue mowing the slope!



WARNING Failure to observe the following instructions could result in serious injury or death.

## **SLOPE OPERATION (continued)**

#### DO NOT

Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible. Rapid uphill turns may cause tip-over.

Do not mow near drop-offs, ditches, or embankments. Unstable ground may cause loss of control.

Do not mow on wet grass. Reduced traction could cause sliding.

Do not try to stabilize the mower by putting your foot on the ground.

Do not use grass catcher or other attachments on steep slopes. The added weight may change the stability of the mower thus creating the potential for tip-over.



WARNING Failure to observe the following instructions could result in serious injury or death.

#### FIRE HAZARDS

Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.

Store all fuel in approved containers specifically designed for that purpose.

Allow engine to cool before refueling. Never remove fuel cap or add fuel with engine running.

Do not smoke while refueling or operating the mower.

To reduce fire hazard, keep mower free of grass, leaves and other debris buildup.

If gasoline is spilled, do not attempt to start the

engine. Move mower away from the area of the spill. Do not create any source of ignition until gas vapors have dissipated. Wipe up spilled fuel and dispose of waste properly.

If fuel is spilled on clothing, change clothing immediately.

Before storing, allow mower to cool. Clean fuel and oil spillage.

Never store the mower or fuel container inside a building where there is an open flame.



**WARNING** Failure to observe the following instructions could result in serious injury or death.

#### FIRE HAZARDS (continued)

To prevent fire or explosion, keep sparks and open flames away from battery.

Keep electrical connections clean and tight. Inspect them often. Loose connections and corrosion increase fire risk.

Before disconnecting the negative ground cable, make sure all switches are off. This decreases the chance of sparking and fire.

Use care when backing to avoid pushing the grass bags into the frame or "hot" exhaust muffler of the engine. Fire could result.

To prevent fire and explosion caused by static electricity:

Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.

When practical, remove fuel powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, refuel such equipment on a trailer with a portable container, rather than from a fuel dispenser nozzle.

If a fuel dispenser nozzle must be used, keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.

**WARNING** Failure to observe the following instructions could result in serious injury or death.

#### CHILDREN, BYSTANDERS AND PETS

Tragic accidents can occur if the operator is not alert to the presence of children, bystanders and pets.

Children are attracted to lawn mowers and the mowing activity.

NEVER assume children, bystanders and pets will stay where they were last seen.

#### Be alert to avoid accidents.

Keep bystanders and pets out of the mowing area and keep children under the watchful care of another responsible adult.

Be alert and turn mower off if bystanders, children or pets enter the area.

Before and during backing look BEHIND and DOWN for small children.

Never carry children as passengers. They may fall off and be seriously injured or interfere with safe mower operation.

Never allow children to operate the mower.

Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.



WARNING Failure to observe the following instructions could result in serious injury or death.

#### SERVICE

Never run a mower inside a closed area or without proper ventilation

Keep nuts and bolts tight, especially blade attachment bolts, and keep equipment in good condition.

Never tamper with safety devices. Check their proper operation regularly.

Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.

Never make adjustments or repairs with the engine running unless otherwise specified.

Grass catcher components are subject to wear, damage and deterioration that could expose moving parts or allow objects to be thrown. Frequently check components. Replace with original equipment parts when necessary.

When servicing blades, wrap blades or wear gloves, and use extra caution.

Batteries contain sulfuric acid. To prevent burns, avoid contact with skin, eyes and clothing.

#### DIXON® ZTR® RESIDENTIAL WARRANTY POLICY SpeedZTR™ & RAM 42 - Residential Mowers

DIXON® WARRANTS ITS ZTR® MOWERS AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR THE PERIODS SET FORTH BELOW. THE SOLE REMEDY UNDER THIS WARRANTY IS REPLACEMENT OR REPAIR OF PARTS INCLUDING LABOR COSTS. THIS WARRANTY IS SUBJECT TO THE FOLLOWING CONDITIONS AND LIMITATIONS:

- 1. RESIDENTIAL APPLICATION (used only at owner's primary place of residence):
  - a. Two Years 100% parts and labor subject to the conditions and limitations described herein for a period of two years from date of purchase by the original owner.
  - b. Third year limited to 100% parts cost as shown in the current Dixon® Parts Price List and subject to the conditions and limitations as described herein.
  - c. Attachments marketed through or approved by Dixon are warranted for two years parts and labor in residential use applications.
- 2. NOT APPROVED FOR COMMERCIAL USE.
- Lifetime warranty on all frames and leading edge of all fabricated (welded) decks (SPEEDZTR™ 36 & 44 only).
- 4. All Dixon® warranty must be accomplished by authorized Dixon® dealers and in accordance with Dixon® warranty policy and allowances. All warranty claims must be submitted to Dixon for approval.
- 5. Warranty applies to new mowers.
- 6. Warranty labor reimbursement to dealers based on published Dixon® flat rate schedule.
- Warranty does not apply to damage in transit or incidents of misuse, negligence, accidents, or alteration. The use of parts or components other than those supplied by Dixon VOIDS ALL WARRANTY.
- 8. Battery warranty is limited to 1 year from mower manufacture date.
- 9. The following items are not covered by this warranty policy:
  - (a) Routine maintenance or adjustments to include any oils, filters or other fluids used.
  - (b) Belts, blades, tires and cosmetic appearance (paint, seat fade, etc.)
  - (c) Pick up and delivery charges for transportation of mower to and from an authorized Dixon® dealer's place of business.
  - (d) Engines. These are covered under a separate warranty by each individual engine manufacturer. Consult engine manual for warranty details.
  - (e) Any costs or expense of providing substitute equipment while repair work is being performed on a warranted mower.
- 10. THERE IS NO OTHER EXPRESS WARRANTY. TO THE EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED, OTHERWISE, ALL SUCH IMPLIED WARRANTIES ARE LIMITED TO THE SAME DURATION AND REMEDIES AS THE EXPRESS WARRANTY. ALL LIABILITIES FOR CONSEQUENTIAL DAMAGES UNDER ANY EXPRESS OR IMPLIED WARRANTY ARE EXCLUDED.

#### **SpeedZTR™ 36 Model 968999539**

Chassis: 1½" x 2" rectangle tubular side frame

Body: Body parts are made of steel

Mower Deck: 36" (91cm) 11 gauge fabricated construction with

reinforced ribs.

Blade Drive: Electric clutch

Transmission: Each rear wheel is independently driven by a

Hydro Gear EZT hydrostatic drive with cooling fan.

Engine: 16.5 HP Briggs & Stratton Intek, 4-cycle, single

cylinder, overhead valve, air-cooled, gasoline, vertical shaft, cast iron cylinder, full pressure lube

with spin-on filter

Starting Electric-key switch operation with safety interlocks

System: on park brake, steering levers and blade drive.

Tires: Front 11 x 4.00-5 smooth tread 16-21 PSI

(110-145 kPa)

Rear 18 x 7.50-8 4-ply turf tread 8-14 PSI

(55-97 kPa)

Capacities: Fuel 4.5 gallon (17 liters)

Engine Oil 1.3 quarts (1.3 liters)

Dimensions: Width 43" (109 cm) maximum track width

Height 43" (109 cm) to top edge of seat

Length 69" (175 cm) hitch tab to front

Weight 574 lbs. (260 kg)

#### **SpeedZTR™ 42 Model 968999546**

Chassis: 1½" x 2" rectangle tubular side frame

Body: Body parts are made of steel

Mower Deck: 42" (91cm) 13 gauge stamped 2 blade deck

Blade Drive: Electric clutch

Transmission: Each rear wheel is independently driven by a

Hydro Gear EZT hydrostatic drive with cooling

fan.

Engine: 16.5 HP Briggs & Stratton Intek, 4-cycle, single

cylinder, overhead valve, air-cooled, gasoline, vertical shaft, cast iron cylinder, full pressure lube

with spin-on filter

Starting Electric-key switch operation with safety interlocks

System: on park brake, steering levers and blade drive.

Tires: Front 11 x 4.00-5 smooth tread 16-21 PSI

(110-145 kPa)

Rear 18 x 8.50-8 4-ply turf tread 8-14 PSI

(55-97 kPa)

Capacities: Fuel 4.5 gallon (17 liters)

Engine Oil 1.3 quarts (1.3 liters)

Dimensions: Width 43" (109 cm) maximum track width

Height 43" (109 cm) to top edge of seat

Length 69" (175 cm) hitch tab to front

Weight 537 lbs. (244 kg)

#### **SpeedZTR™ 44 Model 968999547**

Chassis: 1½" x 2" rectangle tubular side frame

Body: Body parts are made of steel

Mower Deck: 44" (112cm) 11 gauge fabricated construction with

reinforced ribs.

Blade Drive: Electric clutch

Transmission: Each rear wheel is independently driven by a

Hydro Gear EZT self contained hydrostatic drive

Engine: 20 HP Briggs & Stratton, twin cylinder, overhead

valve, air-cooled, gasoline, vertical shaft, full pressure lube with air filter, aluminum head and

block withcast iron cylinder liners

Starting Electric-key switch operation with safety interlocks

System: on park brake, steering levers and blade drive.

Tires: Front 11 x 4.00-5 smooth tread 16-21 PSI

(110-145 kPa)

Rear 18 x 9.50-8 4-ply turf tread 8-14 PSI

(55-97 kPa)

Capacities: Fuel 4.5 gallon (17 liters)

Engine Oil 1.3 guarts (1.3 liters)

Dimensions: Width 43" (109 cm) maximum track width

Height 43" (109 cm) to top edge of seat

Length 69" (175 cm) hitch tab to front

Weight 570 lbs. (259 kg)

#### **SpeedZTR™ 44 Model 968999538**

Chassis: 1½" x 2" rectangle tubular side frame

Body: Body parts are made of steel

Mower Deck: 44" (112cm) 11 gauge fabricated construction with

reinforced ribs.

Blade Drive: Electric clutch

Transmission: Each rear wheel is independently driven by a

Hydro Gear EZT self contained hydrostatic drive

Engine: 20 HP Kohler, single cylinder, overhead valve, air-

cooled, gasoline, vertical shaft, full pressure lube with air filter, aluminum head and block withcast

iron cylinder liners

Starting Electric-key switch operation with safety interlocks

System: on park brake, steering levers and blade drive.

Tires: Front 11 x 4.00-5 smooth tread 16-21 PSI

(110-145 kPa)

Rear 18 x 9.50-8 4-ply turf tread 8-14 PSI

(55-97 kPa)

Capacities: Fuel 4.5 gallon (17 liters)

Engine Oil 1.3 guarts (1.3 liters)

Dimensions: Width 43" (109 cm) maximum track width

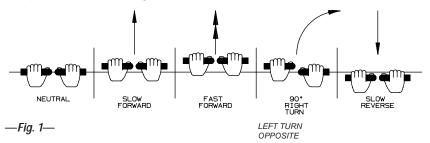
Height 43" (109 cm) to top edge of seat

Length 69" (175 cm) hitch tab to front

Weight 570 lbs. (259 kg)

#### **CONTROL LEVERS**

For access to the seat, move control levers to neutral position and swing them outward.



#### **TO GO FORWARD**

- From neutral position, gently push control levers forward.
- To increase speed, move levers further forward.

#### TO GO BACKWARDS

 From neutral position, gently pull control levers toward you.

#### TURNING

- Turning is controlled by moving one control lever slightly forward or rearward of the other.
- To turn left, move left lever rearward of the right lever.
- To turn right, move right lever rearward of the left lever.
- To turn on mower's own axis (zero turning radius), stop and move one lever to reverse position and the other to forward position.

#### **BRAKING**

 To brake mower, move both levers in direction opposite of travel.

NOTE: The pressure required to operate the mower is very light.

#### PARK BRAKE

The park brake is designed to hold the mower from moving and is not intended for use in stopping the mower while it is in motion. The engine will stop if the park brake is engaged while the control levers are in the drive position.



#### CAUTION

Engage park brake before starting engine.

#### TO SET PARK BRAKE

The hand operated park brake is located on the operator's left.

- •To engage brake, pull lever up (to the rear).
- •To release brake, move lever forward (down).

NOTE: Always set park brake before dismounting. Release park brake before moving mower.

#### TRANSMISSION DRIVE SYSTEM

Allows the mower to turn on its own axis "ZERO TURNING RADIUS". Each lever controls one side of the mower.

NOTE: The pressure required to operate the mower is very light.



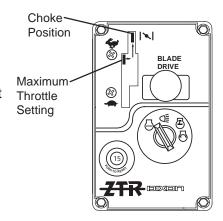
-Fig. 2—

#### **BLADE DRIVE**

- · Located on the operator's right.
- To engage the mower blade, pull the knob to the ON position.
- To disengage mower blade, push the knob to OFF position.

#### THROTTLE CONTROL LEVER

- Located on control panel to operator's right.
- Throttle control for engine speed.
- Throttle control should be set to MAXIMUM or wide open setting to insure adequate cooling of the engine and to maintain mower deck blade speed while mowing.



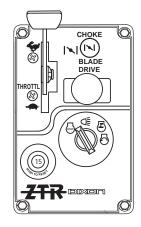
—Fig. 3—

#### **CHOKE CONTROL**

 Choke for engine starting. On the 36" and 42" models, the choke is combined with the throttle. See Fig. 3.
 The 44" has a separate choke cable.
 See Fig 4.

#### **CIRCUIT BREAKER**

- Protection of the electrical system is by (1) 15 amp circuit breaker
- If circuit breaker trips, push button (lower left side of control panel) to reset.
- If this condition repeats, consult dealer for inspection and repair



—Fig. 4—

#### MOWER DECK CUT HEIGHT LIFT LEVER

- Use right foot to operate deck foot pedal at right front foot area.
- To raise mower deck, push forward with right foot on top portion of foot pedal. When desired deck height is reached, push with right foot on lower portion of foot pedal until bottom of the pedal engages in deck positioning notch.
- To lower deck, push forward with right foot on top portion of foot pedal until bottom edge of pedal disengages deck positioning notch. Lower deck to desired height and push bottom portion of foot pedal until bottom edge engages notch.
- Never attempt to operate deck lift mechanism in any manner other than foot method described above.
- Always use highest position for transport.

The safe and successful operation of the SpeedZTR will depend upon the operator having the correct knowledge of all controls used on the mower and making good judgements about the terrain to be mowed.

NEVER allow anyone who does not have complete knowledge of all controls and their functions to operate the mower.

*NEVER* dismount mower without applying park brake <u>or</u> stopping engine.

During initial operation, "learning to drive", set throttle at slow speed.

Sound judgement by the operator will prevent accidents.

#### **BEFORE OPERATING MOWER**

- 1. Read engine manufacturer's operating and maintenance instructions.
- 2. Read and observe all safety instructions on your mower and in the manual.
- 3. Check engine oil.
- 4. Check fuel cap to be sure it is in place.
- 5. Be sure park brake is on.
- Mower blade drive is off.
- 7. Steering levers are in outward position.
- 8. Know how to stop engine. (Turn key to OFF position).



WARNING Failure to observe the following instructions could result in serious injury or death.

#### STARTING INSTRUCTIONS

- 1. Park brake must be on, control levers in outward position and blade drive disengaged.
- 2. Position throttle to choke position if engine is cold. Full throttle if warm
- 3. Insert ignition key and turn to START position. When engine starts, release ignition key. Key will return to RUN position.
- 4. Move throttle to maximum speed position.
- Release park brake.
- 6. Swing levers inward.
- 7. Operate mower per "CONTROL" instructions on Page 19.



#### CAUTION

Do not operate the engine in an enclosed area due to the harmful exhaust gas produced.

NOTE: When moving with blades engaged, set throttle control to the MAXIMUM or wide open setting to insure adequate cooling of the engine and to maintain mower deck blade speed.

# TOWING TRAILERS AND OTHER ATTACHMENTS

Towing a trailer or other attachment that is too heavy could damage the drive or cause the mower to become unstable. Limit loads to 250 pounds (113 kg) or less with this mower.

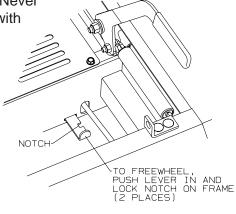
# TO FREE WHEEL MACHINE (Unlock Transmission)

Always turn off engine before engaging or disengaging the hydro release (free wheel) lever. Never attempt to move the lever with the engine running.

Lift the seat to access release levers. Push the hydro release levers toward the rear of the machine and inward until notches lock in place on frame. (See Fig. 4) Release park brake.

To engage the transmissions, move the release levers outward so they return to normal position.

distances over 1/2 mile



NOTE: Before pushing or towing tractor, transmission must be unlocked and park brake released. The tractor should never be pulled at more than 2 miles per hour (3.2 km/h) or for distances over ¼ mile (.402 km). Trailer the unit for

-Fig. 4—

#### TESTING OF SAFETY INTERLOCK SYSTEMS



**WARNING** Failure to observe the following instructions could result in serious injury or death.

The following tests should be performed at the start of each mowing day.

#### PARK BRAKE SWITCH TEST

- 1. Swing control levers to outward position.
- Disengage blade drive.
- 3. Put park brake in OFF position.
- 4. Turn ignition switch to START.

#### ENGINE SHOULD NOT TURN OVER OR ATTEMPT TO START.

#### CONTROL I EVER SWITCH TEST

- 1. Disengage blade drive.
- 2. Put park brake in ON position.
- Swing control levers inward.
- Turn ignition switch to START.

#### ENGINE SHOULD NOT TURN OVER OR ATTEMPT TO START.

NOTE: If any safety check fails, do not operate the mower until the system has been checked and repaired by an authorized Dixon dealer.

#### TESTING OF SAFETY INTERLOCK SYSTEMS



**WARNING** Failure to observe the following instructions could result in serious injury or death.

The following tests should be performed at the start of each mowing day.

#### **BLADE DRIVE SWITCH TEST**

- 1. Put park brake in ON position.
- Swing control levers to outward position.
- 3. Engage blade drive switch.
- 4. Turn ignition switch to START.

#### ENGINE SHOULD NOT TURN OVER OR ATTEMPT TO START.

#### **SEAT SWITCH TEST**

- 1. In a **safe area** away from bystanders, start engine.
- 2. Leave control levers in outward position and put park brake in OFF position.
- Rise slightly off seat. Engine should stop!
- Restart engine.
- 5. Leave control levers in outward position and put park brake in ON position.
- 6. Make sure area is clear of bystanders. Engage blade drive and rise slightly off the seat. Engine should stop!

NOTE: If any safety check fails, do not operate the mower until the system has been checked and repaired by an authorized Dixon dealer.

#### MOWING WITH A MULCHING ATTACHMENT

Mulching or recycling the grass clippings requires a totally different mowing approach than would be normal when side discharging or bagging the grass. There may be instances or conditions where it is not possible to hide all the recycled or mulched clippings.

In order to achieve the best results, please read and follow the mulching tips listed below:

- 1. Read and follow the installation instructions that are included with your mulcher.
- Set the engine speed control to the wide open or full setting.
- Place the mower deck cut height selector in either the top or second notch. Never cut more than 3/4" (19 mm) to 1" (25mm) off the grass at any one time. Attempting to cut more grass will result in the deck plugging and cause the engine to stall.
- It may be necessary to cut the lawn twice to achieve acceptable mulching performance especially on first cuttings or if the lawn is heavily fertilized.
- 5. Do not attempt to cut grass when it is wet. Mulching performance will be very poor in wet grass conditions.
- 6. Maintain sharp blades throughout the cutting season. This is very important. Optimal mulching performance cannot be obtained with a dull or nicked blade.

# MOWING WITH A MULCHING ATTACHMENT (continued)

- 7. Keep the underside of the mower deck clean. Remove all grass and dirt buildup from the underside of the pan, the baffles and deflectors after each use. Never, under any circumstances, should you place hands or feet under the mower deck or in the chute while blades or impeller are still turning.
- Alternate mower direction. This will evenly disperse the mulched grass clippings over the lawn for even fertilization.

If the mulching quality of the mower does not seem to be satisfactory, try one or more of the following tips:

- · Raise the height-of-cut setting on your mower.
- It may be necessary to cut your grass more frequently.
- Operate the mower at a slower ground speed.
- Overlap cutting swaths instead of cutting a full swath with each pass.
- Mow across the marginal areas a second time.
- CUT HIGH MOW OFTEN!

# MOWING WITH A GRASS CATCHER ATTACHMENT

In order to achieve optimum performance when mowing with a grass catching attachment, please read and follow the tips listed below.

- 1. Read and follow the installation instructions that are included with your grass catcher.
- 2. Set engine speed control to the wide open or full setting.
- 3. Do not attempt to cut grass when it is wet. Wet grass will clog both the underside of the deck and the attachment chutes. Empty bags often to prevent plugging.
- 4. If the grass is tall, place the mower deck cut height selector in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass.
- 5. Keep the underside of the mower deck clean. Frequent removal of dried grass and dirt will greatly assist in bagging of the clippings. Never, under any circumstances, should you place hands or feet under the mower deck or in the chute while blades or impeller are still turning.
- 6. Operate the mower at a slower ground speed than when mowing without a grass catching attachment.

# MOWING WITH A GRASS CATCHER ATTACHMENT (continued)

- 7. Maintain sharp blades throughout the cutting season. Some grass catching attachments require a "high-lift" blade. See your dealer for advice on the type of blade(s) needed for your mower.
- 8. Some mowing applications/use of grass catchers may require that an additional weight kit be fitted to the mower to counter the weight of grass in the bags. Please consult with your dealer for more information regarding installation and adding weight to the box.



**WARNING** Failure to observe the following instructions could result in personal injury.

- Watch for low hanging branches or other obstacles which might hit the catcher top while turning or backing the mower
- Use care when backing to avoid pushing the grass bags into the frame or "hot" exhaust muffler of the engine. Fire could result.
- Disengage blade and stop engine prior to clearing grass from either the discharge chute or grass catcher components.
- Do not operate the mower with the grass catching attachment partially removed. Operator or bystanders could be injured by thrown objects.
- · Keep all attachment bolts tight.
- Important: <u>Do not</u> leave clippings in the bags while the mower is stored. Damp grass clippings are a fire hazard if left in the bag.

#### SIDE DISCHARGE OF THE CLIPPINGS

In order to achieve optimum performance when side discharging the grass clippings, please read and follow the tips listed below. Additional information can be found in the Troubleshooting guide on Page 44-45.



#### CAUTION

To avoid personal injury, be sure that the deflector is properly installed on the discharge chute.

- 1. Set engine speed control to the wide open or full setting.
- 2. Do not attempt to cut grass when it is wet. Wet grass will clog the underside of the deck and discharge area.
- If the grass is tall, place the mower deck cut height lever in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass. Some applications may require a second cutting.
- 4. Keep the underside of the mower deck clean. Frequent removal of dried grass and dirt will allow the clippings to discharge correctly. Never, under any circumstances, should you place hands or feet under the mower deck or in the chute while blades or impeller are still turning.
- 5. Maintain sharp blade(s) throughout the cutting season.

#### **GRASS HEIGHT AND CUTTING SUGGESTIONS**

Do not attempt to cut grass when it is wet.

If the grass is tall, place the mower deck cut height lever in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass. Some applications may require a second cutting.

Keep the underside of the mower deck clean.

Maintain sharp blades throughout the cutting season.

As a rule of thumb, never cut off more than one third of the total grass blade length. Correct mowing height can reduce weeds and disease by 50% to 80%.

The following grass cut heights are based on adequate moisture conditions and normal thatch buildup in a healthy lawn. Some locations and applications may require slightly different cut heights. If in doubt, consult your local lawn professional for assistance.

<u>Grass Types</u>	Best Cut Heig	<u>hts</u>
Bermudagrass	1 - 2"	(25-51 mm)
Bluegrass	2 - 3"	(51-76 mm)
Buffalograss	1½ -3"	(38-76 mm)
Ryegrass	2 - 3"	(51-76 mm)
Tall Fescue	3-31/2"	(76-89 mm)
Zoysiagrass	1 - 3"	(25-76 mm)

#### CARE AND MAINTENANCE



**WARNING** Failure to observe the following instructions could result in serious injury or death.

Before performing any maintenance, turn off engine, allow to cool and remove key.

Use extreme care when working on machinery.

Do not wear watch or jewelry.

Do not wear loose fitting clothes, and observe all common safety practices with tools.

#### MAINTENANCE SCHEDULE

Check deck drive belt	after 20 hours break-in
Check crankcase oil level	before each use
<ul><li>Clean grass &amp; debris from muffler &amp; ma</li></ul>	nifold area before each use
Check air intake screen	after each use
•Clean grass under deck	after each use
Check tire pressure	every 10 hours
Inspect blades for sharpness	every 10 hours
•Clean air filter element	every 25 hours
•Grease all zerks	every 50 hours
Check all belts	every 50 hours
Change engine crankcase oil	after 5 hours break-in and
	every 50 hours
•Change engine oil filter	every 50 hours
Replace air filter element	annually or every 100 hours

## **CARE AND MAINTENANCE**



#### CAUTION

Stop engine and remove ignition key for safety. Wear heavy, thick gloves when holding onto cutter blade, avoid the sharp edge of the blade.

#### **CUTTER BLADE MAINTENANCE**

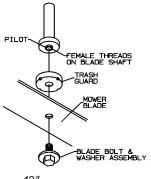
Check sharpness of mower blades after every 10 hours of operation. Observe proper blade position prior to removal.

- 1. Safely raise front of mower.
- 2. Hold or block blade from turning.
- Loosen blade bolt and remove blade.
- When replacing blade, tighten blade bolt securely. Be sure blade is centered on pilot before tightening. See chart

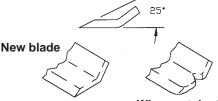
	PILOT
MOWER BLADE	
LOCKWASHER	
36" and 44"	

36" and 44" 50-60 ft. lbs. (68-81 Nm) —Fia.5—

Deck Size:	Tighten to:
36",44"	50-60 ft. lbs. (68-81 Nm)
42"	35 ft. lbs. (48 Nm)



Blades should be discarded when worn excessively.



—Fig. 7—

When notch starts, discard blade

42" 35 ft. lbs. (48 Nm) —Fig.6—

> DANGEROUS! Do not use blade in this condition!

## **CARE AND MAINTENANCE**

#### **ENGINE**

For complete maintenance and operating information of the engine, please refer to the maintenance instructions furnished by the engine manufacturer included in your Zero Turn Radius mower information packet.



Battery contains sulfuric acid electrolyte that is poisonous and corrosive.

#### **BATTERY**

This is a maintenance-free battery and the fluid level cannot be checked. Charge battery if required.

#### OFF SEASON BATTERY STORAGE

- DO NOT remove battery from mower.
- Clean top of battery and terminals with baking soda and water.
- Identify each cable so they can be reconnected to the correct terminal.
- Disconnect cables from terminals. ALWAYS disconnect ground cable first and reconnect last.
- · Charge battery.

NOTE: Your Dixon mower comes equipped with a quick disconnect harness for the optional Dixon Battery Manager. The Dixon Battery Manager maintains the proper charge levels during periods of inactivity and may prevent premature battery failures. Contact your dealer for more information.

### **TIRES**

Correct tire pressure is essential for efficient operation of the mower. Check tire pressure periodically. Inflate tires to the pressure listed below.

Front tires	11 x 4.00 - 5	16-21 PSI	(110-145 kPa)
Rear tires 36"	18 x 7.50 - 8	8-14 PSI	(55-97 kPa)
Rear tires 42"	18 x 8.50 - 8	8-14 PSI	(55-97 kPa)
Rear tires 44"	18 x 9.50 - 8	8-14 PSI	(55-97 kPa)

Lug nuts or lug bolts should be checked regularly for tightness.

#### **LUBRICATION**

CHASSIS: (9) grease zerks

LOCATIONS: (2) front wheel axles

(2) front wheel casters

(2) deck lift shaft(2) control levers

(1) mower deck hub

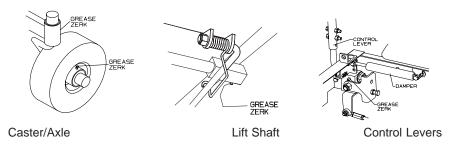
SERVICE INTERVALS: Every 50 hours of operation or

once per season.

RECOMMENDED Name brand wheel bearing

GREASE: or multipurpose grease

(3 pumps each)



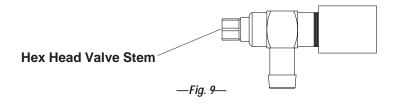
—Fig. 8—

CAUTION

HOT oil may cause burns. Allow engine to cool before draining oil.

#### CHANGING THE ENGINE OIL

- The "Dapco" oil drain valve is located on the left side of the engine crankcase.
- 2. Place a suitable container under the drain valve hose.
- To drain, turn hex head valve stem counter-clockwise with a 10mm wrench or socket. (See Fig. 9) Open to full open (approximately 7 turns).



- 4. After engine is drained, tighten hex stem.
- 5. Change oil filter.
- 6. Fill with oil (see steps below).

NOTE: Refer to engine manufacturer's recommendations for frequency of oil changes.

#### **OIL FILL**

- 1. Clean any spilled oil from engine and chassis.
- 2. Make sure the hex stem on drain valve has been tightened.
- 3. Refill engine with type and quantity of oil recommended by the engine manufacturer in engine literature.

NOTE: Engine oil changes on the SpeedZTR™ will require replacement of the oil filter. These filters may be available from your authorized Dixon dealer.

#### **BELTS**

Check belts every 50 hours. Replace any belts showing signs of wear or cracking.

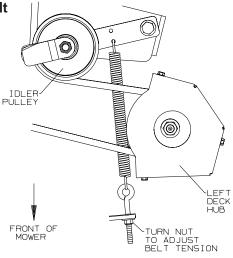
#### **BELT TENSION**

**Transmission Drive Belt - P/N 539 120772**No adjustment necessary.

**Engine to Mower Deck Belt** 

36" P/N 539 117811 42" P/N 539 122734 44" P/N 539 118156

To adjust the tension of the mower deck drive belt, turn adjuster nut on threaded eyebolt.
Turning nut to the left will loosen the belt, see Fig 10. Idler arm, spring and eyebolt location/appearance will vary on some models.



—Fig. 10—

NOTE: Engaging the blade clutch may produce a sharp, high pitched chirp or squeal as the belt tension loading is absorbed by the idler system. This is normal and not a sign of failure.

Belt deflection or movement should be approximately  $\frac{1}{4}$  when measured at mid-point between pulleys. Periodically inspect both belt and idler systems.

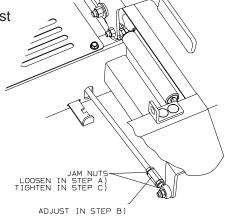
#### **NEUTRAL ADJUSTMENT**

Drive machine until Hydrostatic Transmissions have warmed up. With engine running and the park brake off, swing the control levers outward. If machine starts to creep, follow the instructions below.

- 1. Stop the engine, engage park brake and raise rear of frame with jack or blocks so that rear tires do not contact the ground.
- 2. Swing control levers outward, start the engine and release the park brake.
- 3. Raise the seat to access hydro control linkage. If right wheel creeps, adjust right side linkage and vice-versa. Use procedure below, see Fig. 11.
  - a. Loosen jam nut on end of the coupler P/N 539 116689.
  - b. If right wheel is creeping forward, turn coupler counter-clockwise until neutral is achieved (clockwise for left side). If right wheel is creeping backward, turn coupler clockwise until neutral is achieved (counter-clockwise for left side).

c. Tighten jam nut against coupler.

4. Stop engine and remove rear of machine from jack or blocks.



-Fig. 11—

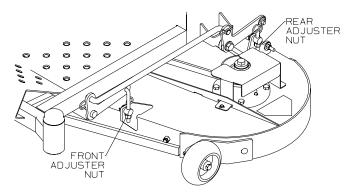
### MOWER DECK LEVELING PROCEDURE

 Place mower on a smooth, level surface and rotate casters in the direction of forward travel. Tires should be inflated as follows.

> Front 16 - 21 PSI (110-145 kPa) Rear 8 - 14 PSI (55-97 kPa)

- 2. Put the mower deck in the mid-range cut height position.
- Turn blade so the two outer blade tips each point outward.
- 4. Turn front adjuster nut(s) to level deck side to side.
- 5. Turn all bladed so tips point to the front and rear.
- 6. Turn rear adjuster nut(s) until blade is level to ½" (6mm) higher in the rear, see Fig. 12.

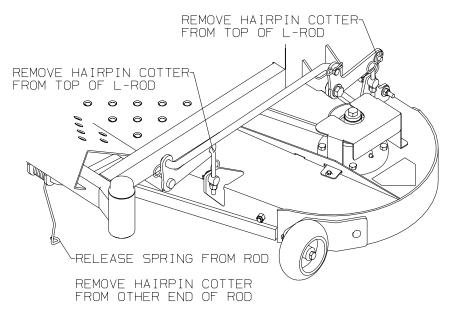
NOTE: This will place the mower deck in a base measurement position. Additional adjustment may be required to achieve desired cut for the type of grass or conditions involved.



—Fig. 12—

### **DECK REMOVAL**

- 1. Place cut height pedal in lowest cut position.
- 2. Remove deck drive belt from engine pulley.
- Release spring from trailing rod (2 places). Remove hairpin cotter from the other end of trailing rods (2 places) and detach rods from deck.
- 4. Remove hairpin cotter from top of front L-Rods (2 places) and detach L-Rods from lift arms.
- 5. Remove hairpin cotter from top of rear L-Rods (2 places) and detach L-Rods from lift arms.
- Carefully raise and support front of chassis. Slide mower deck to either side for removal. (Reverse procedure to reinstall deck assembly.)



—Fig. 13—

#### **ELECTRICAL SYSTEMS**

Keep all connections clean and tight.

#### **CLEANING THE MOWER**

Wash mower periodically. Clean above and below deck. High pressure washing and alkaline based soaps can cause damage to bearings and other parts of the mower. After washing your mower, start the engine and engage the mower deck for a few minutes to disperse any water that may have accumulated in bearings, pulleys or fans.

NOTE: Allow mower to cool before washing. If bearings are hot, they will draw moisture inside as they dry and cause corrosion.

#### SERIAL NUMBERS

The serial number is located on frame at rear of engine.

#### **WARRANTY**

Refer to warranty information (page 15).

#### PARTS/SERVICE

See your authorized Dixon dealer for replacement parts, warranty or service.

## STANDARD SERVICE PARTS LIST

#### **BLADES AND BELTS**

36" Deck

#### **Blade**

' Hi-Lift Fusion	P/N 539 118672
Standard Lift Fusion	P/N 539 115536
Standard Lift	P/N 539 115242
Hi-Lift Gator Fusion	P/N 539 118673
Gator	P/N 539 125846

**Transmission Belt** P/N 539 120772 **Deck Belt** P/N 539 117811

#### 42" Deck

#### Blade

*	Hi Lift Fusion	P/N 539 119843
	Hi-Lift -	P/N 539 119851

**Transmission Belt** P/N 539 120772 **Deck Belt** P/N 539 122734

#### 44" Deck

#### Blade

*	Hi Lift Fusion -	P/N 539 119836
	Super Hi-Lift Fusion -	P/N 539 119798
	Standard Lift Fusion -	P/N 539 119860
	Gator Fusion -	P/N 539 119862
	Hi-Lift -	P/N 539 119858
	Standard Lift -	P/N 539 119859

Transmission Belt P/N 539 120772 Deck Belt P/N 539 118156

#### **ENGINE AIR AND OIL FILTERS**

Refer to Engine Operator's Manual for correct service intervals for engine oil changes and air filter maintenance.

Protect your engine investment, use only original equipment filters. Refer to the Engine Operator's Manual or ask your dealer for correct replacement parts.

<sup>\*</sup>Factory installed

# **TROUBLESHOOTING**

1. ENGINE WON'T TURN OVER  Mower blades engaged disengage blades Park brake not on engage park brake Dead battery charge or replace Solenoid consult dealer Ignition switch consult dealer Starter consult dealer
2. ENGINE WILL TURN OVER BUT WON'T START  No fuel refuel and/or clean or replace fuel filters
3. HARD TO START ENGINE Fuel line clogged clean fuel line and check fuel filter
4. ENGINE STARTS BUT CUTS OUT  Water in fuel drain old fuel-replace with new fuel  Clogged fuel line check fuel filter  Fuel tank vent plugged clean fuel vent  Faulty fuel pump consult dealer
5. ENGINE OVERHEATED Air intake screen or fins clogged clean intake screen and fins Oil level too low or too high adjust oil level Running engine too slow run engine faster
6. ENGINE RUNS BUT MOWER WON'T MOVE FORWARD  Drive belt broken or slipping replace drive belt  Transmission oil low add oil  Damaged transmission consult dealer  Transmission bypass may be engaged disengage (see page 23)
7. MOWER LOSES POWER OR TRANSMISSION OVERHEATS Engine air filter

# **TROUBLESHOOTING**

8. ENGINE STALLS WHEN BLADES ARE ENGAGED Operator not on seat sit on seat Faulty interlock system
9. DRIVE SYSTEM Mower pulls to side check tire inflation/consult dealer Mower creeps in neutral consult dealer Low on power
10. CUT QUALITY  Cut uneven left to right check tire inflation/level deck  Ends of grass blades are ragged sharpen blades  Poor dispersal of grass clean deck/check for loose belt  Skips in spots check for loose belt/slow ground speed



# **OWNER'S INFORMATION**

Date of Purchase			
Mower Model Nu	mber		
Mower Serial Nur	mber		
Purchased From	 Name		
	Address		
DATE OIL CHAN	IGED		DATE ENGINE TUNED
		-	
		-	
		_	
		_	



### Dixon and ZTR® are registered trademarks of Dixon



WARNING The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.